

# **Water Replenishment District of Southern California**

## ***Engineer***

### **THE ORGANIZATION**

The Water Replenishment District of Southern California (WRD) was formed in 1959 to manage the Central and West Coast groundwater basins.

WRD's mission is to provide, protect and preserve high quality groundwater through innovative, cost-effective and environmentally sensitive basin management practices for the benefit of residents and businesses of the Central and West Coast Basins.

WRD provides groundwater for four million residents (10% of the State's population) in 43 cities in a 420-square mile area of southern Los Angeles County. WRD protects the Central and West Coast Groundwater Basins through groundwater replenishment, deterrence of seawater intrusion and groundwater contamination prevention and clean-up programs.

WRD is governed by a five-member elected Board. It has 34 employees and an annual operating budget of \$70 million.

### **THE POSITION**

The Water Replenishment District of Southern California is looking for a motivated self-starter with strong interpersonal and communication skills. Under the direction of the department manager, performs complex professional engineering work in the research and oversight of water resource projects; conducts research and analysis of specialized water resources and engineering issues; manages engineering design and construction work performed by outside contractors and consultants; and performs other duties as assigned. Engineer is the Professional Engineer class in the engineering series. An incumbent is responsible for performing complex engineering assignments requiring the use of judgment and initiative in developing solutions to problems, interpreting policies and determining work assignments. Incumbents are responsible for conducting studies of complex and specialized water resource issues and overseeing and monitoring engineering design and construction activities performed by consultants/contractors.

Engineer is distinguished from Senior Engineer in that incumbents in the latter class are responsible for planning, managing, overseeing and evaluating assigned engineering, capital construction and water quality programs/projects.

### **ESSENTIAL DUTIES AND RESPONSIBILITIES**

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this class.

1. Plans and conducts specialized water resources studies, including recycled water research, wellhead treatment design, water rate analysis, groundwater basin management, saline plume mitigation and the development of alternative water supplies; evaluates the effectiveness of the District's efforts to combat seawater intrusion into groundwater supplies and the replenishment of groundwater at District spreading grounds and develops strategies to improve the effectiveness of these efforts; analyzes the effectiveness and efficiency of conjunctive use and groundwater storage programs; develops groundwater monitoring programs as needed.
2. Prepares specifications, requests for proposals and bid requests; analyzes bids and proposals; prepares estimates of costs for proposed projects and services; negotiates inter-agency contracts; manages and oversees the work of consultants and contractors performing advanced process water treatment plant design and construction; coordinates engineering work activities among professional, technical and support staff, contractors and other government agencies.
3. Oversees the drilling, installation, development and rehabilitation of District monitoring and production wells; oversees the testing of District aquifers.
4. Identifies and determines the scope of water resource engineering problems and recommends review by the Assistant General Manager & District Engineer; participates in the development of plans and solutions to problems identified by District management and/or the Board and identifies resource requirements; prepares agenda items and supporting materials for Board action; attends Board and committee meetings, prepares reports and makes presentations as assigned.
5. Performs special projects as assigned.

## **QUALIFICATIONS**

### **Knowledge of:**

1. Theory, principles and practices of civil engineering design and hydraulic engineering as applied to groundwater management operations.
2. Principles of physics and mathematics applicable to civil engineering.
3. Principles, modern techniques and equipment used in design, construction and maintenance of various capital construction projects.
4. Principles, theories and practices of engineering, hydrology and water quality as applied to groundwater resources and availability in Southern California.
5. Modern scientific methods and techniques used in the study and analysis of groundwater, seawater, surface water and aquifer characteristics.
6. Modern developments, current literature and sources of information regarding engineering, water quality and water resources.

7. Principles and practices of public administration, including contracting and maintenance of public records.
8. Federal, state and local laws, regulations and court decisions applicable to assigned areas of responsibility.
9. Research methods and statistical analysis techniques.

**Ability to:**

1. Conduct and evaluate a variety of engineering and water resource studies.
2. Perform difficult technical research and analyze complex engineering and mathematical problems, evaluating alternatives and recommending or adopting effective courses of action.
3. Plan, organize and manage a full range of capital construction/maintenance projects.
4. Collect, evaluate and interpret appropriate and applicable data, either in statistical, graphic or narrative form.
5. Perform complex engineering and water quality analyses using scientific methods and computer equipment.
6. Conduct independent research studies with a high degree of accuracy.
7. Apply sound, creative problem solving techniques to resolve difficult program issues and problems.
8. Understand, interpret, explain and apply laws, regulations, ordinances and policies applicable to program responsibilities.
9. Perform accurate engineering calculations and cost estimates.
10. Prepare clear, concise and comprehensive reports, correspondence and other documents appropriate to technical and non-technical audiences.
11. Present conclusions and recommendations clearly, logically and persuasively to both internal and external program stakeholders.
12. Ensure the maintenance of all required files, records and documentation.
13. Communicate clearly and effectively, orally and in writing.
14. Establish and maintain effective working relationships with District management, staff, representatives of other agencies, external stakeholders, the public and others encountered in the course of work.

**Accreditation, Education, Training and Experience:**

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from a four-year college or university with a degree in civil engineering, hydrology or a closely related field; and five years of professional engineering experience, including

experience in engineering or water quality research; or an equivalent combination of training and experience. A valid California driver's license and the ability to maintain insurability under the District's vehicle insurance policy. Current, valid registration as a Professional Engineer from the State of California.

## **COMPENSATION**

The salary for the position is \$88,360 to \$118,148 per year and will be dependent upon the education, experience, and accreditations of the selected candidate. In addition, benefits are provided which include: vacation, holidays and sick leave; medical, dental and vision plans; life, short-term and long-term disability insurance; retirement through the California Public Employee's Retirement System (PERS) with Social Security; deferred compensation plans; employee assistance program and educational rebate program.

## **HOW TO APPLY**

Interested candidates can apply by going to the District web site at [www.wrd.org](http://www.wrd.org) to print an application. Supplemental materials such as a resume are encouraged to be submitted however **no candidate will be considered without a fully completed and signed employment application. The position will remain open until filled.**

Completed applications along with supplemental materials may be submitted as follows:

Via mail to:

J H Shaunessy  
Water Replenishment District  
of Southern California  
4040 Paramount Blvd.  
Lakewood, CA 90712

Via fax:  
562-921-6101

Via email:  
[jshaunessy@wrd.org](mailto:jshaunessy@wrd.org)